

September 27, 2013

To: Executive Board

Subject: **Fleet Maintenance Audit Results**

Recommendation

Receive and file the results of the Fleet Maintenance Audits conducted in July 2013.

Analysis

Foothill Transit regularly conducts quarterly maintenance audits of its buses utilizing Vehicle Technical Consultants, Inc. (VTC), an independent contractor.

VTC specializes in vehicle maintenance management, vehicle engineering and quality assurance oversight. Their staff is well-versed in the fields of alternative fuels, preventive maintenance, and new bus quality assurance and vehicle condition assessments.

On a quarterly basis, an audit of selected buses at the Pomona and Arcadia Operations and Maintenance facilities is conducted. This is done over a weekend to avoid impacting delivery of service provided by the operations and maintenance contractor. Thirty buses from each maintenance facility are pre-selected prior to the day of the audit. VTC performed a thorough physical inspection of the buses, operated all systems and inspected them for proper operating condition. VTC also took readings of the air conditioned interior temperatures, tire tread depth, tire pressure readings, and conducted an overall mechanical and aesthetic inspection.

The independent maintenance audit is an effective approach to validate the quality of contractor maintenance efforts. All vehicles must meet or exceed industry as well as Foothill Transit standards for safety, mechanical condition, preventive maintenance inspections, appearance, and maintenance record keeping. These inspections are in addition to and complement California Highway Patrol (CHP) annual fleet and terminal audits required by law.

After each inspection the contractor is supplied with a detailed inspection report and is responsible for making any repairs identified within a reasonable period of time. "Out of Service" items pertaining to Safety or Customer Standard must be repaired before the bus resumes service.

Inspection Results

Pomona:

Vehicle Condition Inspection – There were ten buses noted with out-of-service defects, which required pulling the buses out-of-service. The conditions included an inoperable exit door, inoperable sensitive door edges, an inoperable emergency window, a flat tire, an inaccessible CNG shutoff valve, loose trim molding below the driver's barrier, an air leak on brake application, an inoperable windshield wiper and washer, a missing fire suppression safety lock, and a wheel chair ramp that raises when the door is closed.

Preventive Maintenance Inspection (PMI) performance – The contractors are required to conduct routine PMI and servicing at intervals of 6,000 miles per 30 days or the recommended vehicle manufacturers' specifications. PMI performance was favorable with an average of 5,694 miles between PMIs for all thirty buses. The average time between PMIs was 49 days because a number of the buses that were audited did not reach the 6,000 mile threshold until several days after 30 days in service

File Review – The file review focuses on the completeness of each bus' historical file. The file review looks at work orders, corrective actions, fluid analysis and other inspection reports. No issues were identified with Department of Transportation (DOT) inspections found in the files, although there were several instances where some fields on the inspection work order were not filled in. Federal Transit Administration (FTA) Triennial reviews focus on this aspect of inspection records and it is expected that the forms be fully completed. This has been addressed with the contractor operating service at the Pomona Facility.

Arcadia:

Vehicle Condition Inspection – Arcadia had seven buses noted with out-of-service defects, which required pulling the buses out-of-service. The conditions included a fire extinguisher missing a retaining clip, an inoperable door sensitive edge, a floor trip hazard, an inoperable AC unit, an inoperable dash display, and a kneel light and alarm constantly flashing.

Preventive Maintenance Inspection (PMI) performance – The contractors are required to conduct routine PMI and servicing at intervals of 6,000 miles / 30 days or the recommended vehicle manufacturers' specifications. PMI performance was favorable with an average of 5,766 miles between PMIs for all thirty buses. The average time between PMIs was 41 days.

File Review – As with the Pomona audit, the file review focuses on the completeness of each bus' historical file. The file review looks at work orders, corrective actions, fluid

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analysis and other inspection reports. No issues were identified with Department of Transportation (DOT) inspections found in the file. The oil analysis program was kept on file. However, several files had outdated or missing engine oil and transmission fluid samples. As with Pomona, some fields of the inspection work order were not properly filled in.

The chart below shows the changes from the second quarter audit in April 2013 to the third quarter audit in July 2013. This shows an overall improvement in the condition and maintenance for Foothill Transit's fleet by contractors at Arcadia. However, the same cannot be said at Pomona. Detected vehicle conditions and file review issues increased at Pomona between April and July 2013.

	POMONA			ARCADIA		
	April '13	July '13	% Change	April '13	July '13	% Change
Vehicle Conditions Detected	7	10	+42.8%	7	7	0%
PMI Performance (Miles)	5,795	5,694	-1.6%	5,943	5,766	-2.9%
File Review Issues	7	17	+142.8%	15	5	-66.6%

Budget Impact

Funding for the bus inspection audits is included in Foothill Transit's Fiscal Year 2014 Business Plan.

Sincerely,



Roland M. Cordero
Director of Maintenance and Vehicle Technology



Doran J. Barnes
Executive Director